

[54] **OBJECTIVE PLOTTING OF VISUAL FIELDS
BY EYE MOVEMENT MONITORING**

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3,984,156.[51] Int. Cl.² A61B 3/02[52] U.S. Cl. 351/30; 351/7;
351/23; 353/94[58] Field of Search 351/30, 31, 23, 39,
351/17, 7, 24; 353/94, 98[56] **References Cited****U.S. PATENT DOCUMENTS**

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[57] **ABSTRACT**

An apparatus for measuring and evaluating a subject's visual field presents a target image, consisting of a spot of light, at a series of selected locations within the subject's visual field. Means are provided to monitor his resulting eye movement and positions in response to each target presentation. A projection apparatus presents the target images at various locations and in a programmed sequence. The apparatus also includes means for making a photographic plot of those presented targets which the subject has seen or missed, as desired. Determination of whether subject has seen or missed a particular target is evaluated by logic systems which discriminate between eye movement and positions displaying characteristics indicative of whether the subject has seen or missed the target. The logic discriminates between blinks, hunting eye movements and other characteristic positions and movements which are indicative of the subject having seen the target. Means also are provided to enable selective coarse or fine mapping of selected regions of the subject's visual field.

11 Claims, 23 Drawing Figures